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)-1449/A and B (m RMATION D		-	FILING DATE:	August 19, 2003	CONFIRMATION NO.: 4791		
	EMENT BY			APPLICANT:	Arthur M. Krieg et al.			
61			3	GROUP ART UNIT:	1645	EXAMINER:	Nina Archie	
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U.S. PATENT DOCUMENTS

Examiner's	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited	Date of Publication or Issue of Cited Document
Initials #		Number	Kind Code	Document	MM-DD-YYYY
		5,416,203		Letsinger	05-16-1995
		5,696,248		Peyman et al.	12-09-1997
		7,262,286	B2	Kandimalla et al.	08-28-2007
	1	7,354,711	B2	Macfarlane	04-08-2008
		7,402,572	B2	Krieg et al.	07-22-2008
		7,410,975	B2	Lipford et al.	08-12-2008
		7,488,490	B2	Davis et al.	02-10-2009
		7,517,861	B2	Krieg et al.	04-14-2009
	***************************************	7,524,828	B2	Krieg et al.	04-28-2009
		7,534,772	B2	Weiner et al.	05-19-2009
		7,566,703	B2	Krieg et al.	07-28-2009
		7,569,553	B2	Kreig	08-04-2009
		7,576,066	B2	Krieg	08-18-2009
		7,585,847	B2	Bratzler et al.	09-08-2009
		2002-0151518	A1	Agrawal et al	10-17-2002
		2003-0129605	A1	Yu et al.	07-10-2003
		2005-0266015	Al	Clerici et al.	12-01-2005
		2006-0014713	Al	Agrawal et al.	01-19-2006
		2006-0094680	A1	Agrawal et al.	05-04-2006
		2006-0094681	A1	Agrawal et al.	05-04-2006
		2006-0287262	Al	Agrawal et al.	12-21-2006
		2007-0105801	A1	Agrawal et al.	05-10-2007
		2008-0113929	A1	Lipford et al.	05-15-2008
		2008-0152662	A 1	Agrawal et al.	06-26-2008
		2008-0226649	A 1	Schetter et al.	09-18-2008
		2009-0017021	A1	Davis et al.	01-15-2009
		2009-0060927	A 1	Wagner et al.	03-05-2009
		2009-0137519	Al	Krieg et al.	05-28-2009
		2009-0142362	A1	Krieg et al.	06-04-2009
		2009-0155307	A1	Davis et al.	06-18-2009
		2009-0155212	Al	Bratzler et al.	06-18-2009
		2009-0191188	A1	Krieg et al.	07-30-2009
		2009-0202575	A1	Krieg et al.	08-13-2009

DATE CONSIDERED:

^{*} EXAMINER: Initial if reference considered, whether or notcitation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

EODMARTO	1640/A and D /m	odified.	DTO/SB/08\	APPLICATION NO.:	10/644,052	ATTY. DOCKET NO.:	C1037.70048US00	
	-1449/A and B (n		·	FILING DATE:	August 19, 2003	CONFIRMATION NO.: 4791		
	EMENT BY			APPLICANT:	Arthur M. Krieg et al.			
Sheet	2	of	3	GROUP ART UNIT:	1645	EXAMINER:	Nina Archie	

FOREIGN PATENT DOCUMENTS

Evaminas'a	Cite	Foreign Patent Document			Name of Patentee or Applicant of Cited	Date of Publication of	Translation
Examiner's Initials #	No.	Office/ Country	Number	Kind Code	Document	Cited Document MM-DD-YYYY	(Y/N)
		wo	98/37919	A1	University of Iowa Research Foundation	09-03-1998	
		wo	2008/030455	A2	Coley Pharmaceutical Group, Inc.	03-13-2008	
		wo	2008/033432	A2	Coley Pharmaceutical Group, Inc.	03-20-2008	
		wo	2008/039538	A2	Coley Pharmaceutical Group, Inc.	04-03-2008	
		WO	2008/068638	A2	Coley Pharmaceutical GMBH	06-12-2008	
		wo	2008/139262	A2	Coley Pharmaceutical GMBH	11-20-2008	

OTHER ART — NON PATENT LITERATURE DOCUMENTS

Examiner's Initials #	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Translation (Y/N)
		AGRAWAL et al., Chapter 19: Pharmacokinetics and bioavailability of antisense oligonucleotides following oral and colorectal administrations in experimental animals. 1998: 525-43.	
		BALLAS et al., Divergent therapeutic and immunologic effects of oligodeoxynucleotides with distinct CpG motifs, J Immunol. 2001 Nov 1;167(9):4878-86.	
		BHAGAT et al., CpG penta- and hexadeoxyribonucleotides as potent immunomodulatory agents. Biochem Biophys Res Commun. 2003 Jan 24;300(4):853-61.	
		FATHI et al., Oligonucleotides with novel, cationic backbone substituents: minoethylphosphonates. Nucleic Acids Res. 1994 Dec 11;22(24):5416-24.	
		HARTMANN et al., Rational design of new CpG oligonucleotides that combine B cell activation with high IFN-alpha induction in plasmacytoid dendritic cells. Eur J Immunol. 2003 Jun;33(6):1633-41.	
		KATAOKA et al., Antitumor activity of synthetic oligonucleotides with sequences from cDNA encoding proteins of Mycobacterium bovis BCG. Jpn J Cancer Res. 1992 Mar;83(3):244-7.	
		MARSHALL et al., Identification of a novel CpG DNA class and motif that optimally stimulate B cell and plasmacytoid dendritic cell functions. J Leukoc Biol. 2003 Jun;73(6):781-92.	
		McCLUSKIE et al., CpG DNA is an effective oral adjuvant to protein antigens in mice. Vaccine. 2000 Nov 22;19(7-8):950-7.	
		SAMANI et al., Best minimally modified antisense oligonucleotides according to cell nuclease activity. Antisense Nucleic Acid Drug Dev. 2001 Jun;11(3):129-36.	
		UHLMANN et al., Recent advances in the development of immunostimulatory oligonucleotides. Curr Opin Drug Discov Devel. 2003 Mar;6(2):204-17.	
		VOLLMER et al., Highly immunostimulatory CpG-free oligodeoxynucleotides for activation of human leukocytes. Antisense Nucleic Acid Drug Dev. 2002 Jun;12(3):165-75.	
		VOLLMER et al., Identification of a new class of CpG oligonucleotides capable of inducing both B cell proliferation and high IFN-alpha secretion from PBMC of HCV chronic carriers. Antiv Ther. 2002;7:L115.	
		VOLLMER et al., Impact of modifications of heterocyclic bases in CpG dinucleotides on their immune-modulatory activity. J Leukoc Biol, 2004 Sep;76(3):585-93. Epub 2004 Jun 24.	

DATE CONSIDERED:
·

[#] EXAMINER: Initial if reference considered, whether or notcitation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

EODM PTO	1440/4 and D	/modifie	d PTO/SB/08)	APPLICATION NO.:	10/644,052	ATTY. DOCKET NO.:	C1037.70048US00	
	MATION	•	,	FILING DATE:	August 19, 2003	CONFIRMATION NO.: 4791		
	EMENT B			APPLICANT:	Arthur M. Krieg et al.			
				GROUP ART UNIT:	1645	EXAMINER:	Nina Archie	
Sheet	3	of	3	GROUP ART UNIT.	1045	DATEMINES.	1,1110 11101110	

VOLLMER, CpG motifs to modulate innate and adaptive immune responses. Int Rev Immunol. 2006 May-Aug;25(3-4):125-34.	
VOLLMER, TLR9 in health and disease. Int Rev Immunol. 2006 May-Aug;25(3-4):155-81.	
WEIGEL et al., CpG oligodeoxynucleotides potentiate the antitumor effects of chemotherapy or tumor resection in an orthotopic murine model of rhabdomyosarcoma. Clin Cancer Res. 2003 Aug 1;9(8):3105-14.	1
WEINER et al., Immunostimulatory oligodeoxynucleotides containing the CpG motif are effective as immune adjuvants in tumor antigen immunization. Proc Natl Acad Sci U S A. 1997 Sep 30;94(20):10833-7.	
YAMAMOTO et al., Synthetic oligonucleotides with certain palindromes stimulate interferon production of human peripheral blood lymphocytes in vitro. Jpn J Cancer Res. 1994 Aug;85(8):775-9.	
YU et al., 'Immunomers'novel 3'-3'-linked CpG oligodeoxyribonucleotides as potent immunomodulatory agents. Nucleic Acids Res. 2002 Oct 15;30(20):4460-9.	
YU et al., Immunostimulatory activity of CpG oligonucleotides containing non-ionic methylphosphonate linkages. Bioorg Med Chem. 2001 Nov;9(11):2803-8.	
YU et al., Potent CpG oligonucleotides containing phosphodiester linkages: in vitro and in vivo immunostimulatory properties. Biochem Biophys Res Commun. 2002 Sep 13;297(1):83-90.	

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	DATE CONSIDERED:
	3.112 331.02
1	

[#] EXAMINER: Initial if reference considered, whether or noticitation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.